

**REMARKS**

This Application has been carefully reviewed in light of the Office Action mailed on September 19, 2005. Claims 1-22 are pending in the Application. Claims 15-21 have been cancelled. Applicants respectfully request reconsideration and favorable action in this case.

**Rejections Under § 103(a)**

Claims 1-2, 5-10, and 13 have been rejected under 35 U.S.C. 103(a) over U.S. Patent No. 6,088,368 to Rubinstain et al. ("*Rubinstain*"). Claims 3-4, 11-12, and 14-22 have been rejected under 35 U.S.C. 103(a) over *Rubinstain* in view of U.S. Patent No. 6,775,355 to Bingel et al. ("*Bingel*"). Applicants respectfully traverse.

**Claim 1**

Applicants' independent Claim 1 recites a system comprising a "data switch coupled to one or more customer premises equipment (CPE devices); the data switch comprising software embodied in a computer readable media and operable to: communicate with the one or more CPE devices using a first predetermined power spectral density (PSD); and communicate with the one or more CPE devices using a second predetermined PSD," (Claim 1, lines 5-9) which is not shown by the cited references. In the Office Action's Response to Arguments, the Office Action cites from *Rubinstain* an ADSL standard (col. 2, ll. 63-67) and a VDSL standard (col. 3, ll. 35-43) that have different PSDs as teaching the first and second PSD limitation. Applicants respectfully traverse. These citations are not describing the capability of switch 18 of *Rubinstain* cited by the Office Action. Rather, these citations are from the background section of *Rubinstain*, in which *Rubinstain* is **separately listing different prior art systems**. The ADSL system discussed is a separate system from the VDSL system discussed.

The Office Action further states "the LAN/WAN SWITCH 18, the modem 20 and the splitter 22 performs the same function as the SWITCH 12 in FIG.2 of the current application communicating with one or more CPE devices using a POTS standard and a 10BaseS standard, wherein the POTS and 10BaseS have different PSDs as recited in the claim." Applicants respectfully traverse. Power spectral density is the amount of power per unit of frequency. The

PSD is physical characteristic of the transmission line. In one non-limiting embodiment of Claim 1, the switch recited is operable to communicate to a first and second CPE at a first and second PSD, to account for varying physical capabilities of transmission lines in existing systems (page 8, lines 20-25, Current Application). However, nowhere does *Rubinstain* teach that the POTS standard and the 10BaseS standard taught are at different power spectral densities (PSDs).

As Applicants have previously stated, *Rubinstain* explicitly limits itself to communicating using a single PSD and teaches away from Applicant's limitation of a data switch that can communicate with multiple CPEs at multiple PSDs. According to one particular non-limiting embodiment of Claim 1, a data switch is operable to support use of a first and second PSD in a network, including ones not supported by public standards, thus permitting communication with "a higher bit rate or greater reliability than PSDs that comply with ANSI or ETSI standards." The *Rubinstain* system, however, was designed specifically to comply with public standards. The *Rubinstain* reference discloses the following:

The transmitted power output by the system onto the twisted pair wire is preferably limited to 10 dBm (10mW) in each direction. This power limit is widely incorporated into existing standards such as ANSI and ETSI. The transmit power is limited in order to limit the power spectral density (PSD) on the wire. The downstream power is thus fixed but the power transmitted on the upstream direction is controlled by the downstream link in accordance with the length of the wire so as to maintain the received power in the upstream direction at a constant level. (column 11, lines 19-28).

*Rubinstain* thus explicitly limits itself to a single PSD limited to 10 dBm in each direction that comply with existing standards such as ANSI and ETSI. It therefore does not teach communicating with multiple CPEs at different PSDs. For at least this reason, Claim 1 should be allowed, as should Claims 2-14 which depend therefrom. Claim 22 should be allowed for analogous reasons. Favorable action is requested.

**Claims 15 - 21**

Claims 15-21 have been cancelled rendering their rejection moot.

CONCLUSION

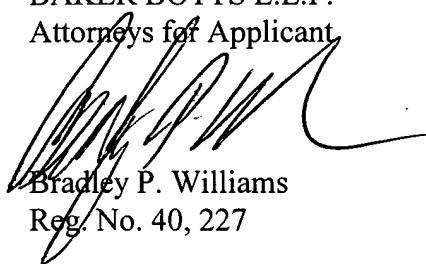
Applicants have now made an earnest attempt to place this case in condition for immediate allowance. For the foregoing reasons and for other apparent reasons, Applicants respectfully request full allowance of all pending Claims.

If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, please feel free to contact the undersigned attorney for Applicants.

Applicants do not believe that any fees are due. However, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.  
Attorneys for Applicant



Bradley P. Williams  
Reg. No. 40,227

Date: November 21, 2005

Correspondence Address:

Customer Number: **05073**